[002] This application claims priority from German Application Serial No. 103 10 422.4 filed March 11, 2003.

[003] FIELD OF THE INVENTION

[004] The present invention concerns a method for interlinking regulation and/or control functions in a motor vehicle~~, according to the preamble of Claim 1~~.

[005] BACKGROUND OF THE INVENTION

[015] ~~These objectives are achieved by the characteristics of Claim 1. Other variants and advantages emerge from the subordinate claims.~~

[016] SUMMARY OF THE INVENTION

[020] BRIEF DESCRIPTION OF THE DRAWINGS

[021] ~~Below, an example of the invention is explained in greater detail~~ The invention will now be described, by way of example, with reference to the ~~attached figures,~~ accompanying drawings in which ~~show~~:

[028] DETAILED DESCRIPTION OF THE INVENTION

1-9. (CANCELED)

10. (NEW) A method for interlinking one or more of regulation and control functions in a motor vehicle, wherein the one or more of the regulation or control functions and a communications structure of the one or more of the regulation or control functions are defined by graphs containing nodes and directed gridlines, such that the nodes of the graphs represent the one or more of the regulation or control functions and directed gridlines represent defined communication paths of the one or more of the regulation or control functions.

11. (NEW) The method according to claim 10, wherein the directed gridlines of the graphs are ordered pairs (X, Y) of the one or more of the regulation or control, which are represented as arrows between the nodes.

12. (NEW) The method according to claim 10, wherein the nodes represent the one or more of the regulation or control functions G_i, R_i and S_i such that G_i is at least one function defined for each system parameter g_i to be controlled, which defines nominal values ${}^{soll}y_i$ for g_i, R_i is at least a second function defined for each system parameter g_i to be controlled, which controls or regulates g_i by means of nominal value specifications for other functions X_1, X_2, X_3, ... and S_i is a third function defined for each control intervention point s_i, which organizes interventions of function X_1, X_2, X_3, ... on the control intervention point s_i, only one node being provided for one function.

13. (NEW) The method according to claim 10, wherein for two nodes (X, Y) just one directed gridline (X, Y) is entered in the graph when the function X transmits a nominal operation mode to the function Y, such that when (X, Y) is a directed gridline in the graph, the function Y transmits just one actual operation condition ${}^{ist}b_Y$ to the function X.

14. (NEW) The method according to claim 13, wherein the function X additionally transmits to the function Y one or more nominal values α, ß, χ, ... for system or the control parameters a, b, c, ... and the function Y transmits to the function X one or more nominal values λ, μ, ν, ... for system or control parameters l, m, n, ...

15. (NEW) The method according to claim 11, wherein via a directed gridline (X, Y) the function Y transmits to the function X optional limits α_{min}, α_{max}, $ß_{min}$,

$ß_{max}$, X_{min}, X_{max}, ... within which nominal value specifications of the function X for system or control parameters a, b, c, ... can be realized by the function Y.

16. (NEW) The method according to claim 11, wherein when several functions X_1, X_2, X_3, ... transmit to the function Y nominal values $^{soll}w_{X1}$, $^{soll}w_{X2}$, $^{soll}w_{X3}$, ... for a parameter w, access conflicts are prevented in that, depending on the actual operation mode $^{ist}b_Y$ of the function Y, the function Y decides which of the nominal values $^{soll}w_{X1}$, $^{soll}w_{X2}$, $^{soll}w_{X3}$, ... will be used or how the nominal value for the parameter w will be calculated from $^{soll}w_{X1}$, $^{soll}w_{X2}$, $^{soll}w_{X3}$, ..., such that the calculation of the actual operation mode by means of nominal operation modes or actual operation mode is carried out in such manner that a clear selection or calculation of the nominal value for w emerges from the quantity of nominal values $^{soll}w_{X1}$, $^{soll}w_{X2}$, $^{soll}w_{X3}$, ...

17. (NEW) The method according to claim 10, wherein the gridlines of the graphs are chosen such that no directed cycle is produced.

18. (NEW) The method according to claim 12, wherein the establishment of the directed gridlines comprises the following steps:

a first table is prepared, in whose first column the functions G_i and in whose first row the functions R_i are entered, so that cells (G_i, R_i) are produced, and when G_i defines a nominal value for g_i, this cell (G_i, R_i) of the table is marked;

a second table is prepared, in whose first row the functions S_i and in whose first column the functions R_i are entered, and when the control parameter s_i influences the system parameter g_j and the function R_i uses the function S_i to control g_j the cell (R_i, S_i) is marked, such that the marked cells of the two tables indicate the directed gridlines of the associated graph.